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# NOTES ON THE LIGNEOUS PLANTS DESCRIBED BY LEVEILLE FROM EASTERN ASIA<sup>1</sup>

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### ELAEOCARPACEAE

Sloanea sinensis (Hance) Hu in Jour. Arnold Arb. v. 230 (1924). Castanopsis Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. XII. 506 (1913); Fl. Kouy-Tchéou, 125 (1914). — Camus, Châtaigniers, 375, 484 (1929). — Synon. nov.

Sloanea Hanceana Léveillé, Fl. Kouy-Tchéou, 420 (1915), vix Hemsley.

Sloanea chengfengensis Hu in Sinensia, 111. 85. (1932). — Synon. nov.

China. K we ich ou: sud de Pin-fa, J. Cavalerie, no. 2514, Sept. 24, 1905 "arbre moyen, rare" (holotype of Castanopsis Cavaleriei; merotype in A. A.); Yang-kia-wan, Cheng-feng, in mixed woods, Y. Tsiang, no. 4641, Oct. 17, 1930 "tree 27 m., bark grey; fruit red" (holotype of S. chengfengensis; isotype in A. A.).

In his Flore du Kouy-Tchéou Léveillé enumerates Cavalerie's no. 2514 under Castanopsis Cavaleriei and also under Sloanea Hanceana. Castanopsis Cavaleriei had been already referred to Sloanea by Handel-Mazzetti (Symb. Sin. vii. 29, 1929) as Sloanea sp.; by A. Camus, l. c., it is enumerated as a doubtful species. Sloanea Hanceana Hemsl. = S. Hemsleyana (Ito) Rehd. & Wils. is very close to S. sinensis from which it differs chiefly in its larger leaves, serrate to near the base and in the shorter, slenderer and denser spines of the fruit.

I am unable to distinguish Sloanea chenfengensis from S. sinensis. Hu says it differs chiefly in the glabrous leaves and in the 4-celled fruits, but in S. sinensis the number of locules varies as in most species between 4 and 6 and the leaves are called by Hance in the original description "glaberrima" and so they are in all the specimens examined.

<sup>&</sup>lt;sup>1</sup>Continued from p. 27; for preceding parts see Vol. x. 108-132, 184-196; XII. 275-281; XIII. 299-332; XIV. 223-252.

#### TILIACEAE

Tilia tuan Szyszylowicz in Hooker, Icon. Pl. xx. t. 1926 (1890).

Tilia tuan var. Cavaleriei V. Engler & Léveillé in Fedde, Rep. Spec.

Nov. vi. 266 (1909). — V. Engler, Monog. Tilia, 124 (1909). —

Schneider, Ill. Handb. Laubholzk. II. 389 (1909). — Léveillé, Fl. Kouy-Tchéou, 420 (1915).

China. K we i chou: Pin-fa, montagnes, au sud, Cavalerie no. 3227, May 30, 1907, "vu 7 ou 8 petits arbres, fl. blanc-jaune" (holotype of T. tuan var. Cavaleriei; photo. in A. A.).

Tilia tuan var. Cavaleriei represents the type of T. tuan according to Engler who has it as "var.  $\alpha$ ," and to Schneider. It differs only slightly from the type specimen in the somewhat narrower leaves, the upper ones measuring 9.5 by 4 cm. to 12 by 5.5 cm.

Tilia Miqueliana Maximowicz in Bull. Acad. Sci. St. Pétersb. xxvi. 434 (1880); in Mél. Biol. x. 687 (1880). — V. Engler, Monog. Tilia, 111 (1909).

Tilia Kinashii Léveillé & Vaniot in Bull. Sci. Bot. France, XLI. 422 (1904).

CENTRAL JAPAN: Kinashi no. 2, (holotype of T. Kinashii; photo. in A. A.).

Tilia Kinashii was already referred to T. Miqueliana by V. Engler and according to a note on the type specimen also by G. Koidzumi.

Grewia biloba G. Don, Gen. Syst. 1. 549 (1831). — Handel-Mazzetti, Symb. vii. 612 (1933).

Grewia glabrescens Bentham, Fl. Hongk. 42 (1861). — Léveillé, Fl. Kouy-Tchéou, 419 (1915).

Grewia Esquirolii Léveillé, Fl. Kouy-Tchéou, 419 (1915), pro synon. Celastrus euonymoides Léveillé, l. c. (1915), pro synon.

Grewia parviflora var. glabrescens Rehder & Wilson in Sargent, Pl. Wilson. II. 371 (1915).

China. K w e i c h o u: Gou-réou, J. Esquirol, no. 3189, Dec. 1911 (probable type of G. Esquirolii; photo. in A. A.); Lo-fou rivière, J. Cavalerie, no. 3513, April 1909, "arb. 2 m." (type of Celastrus euonymoides; photo. in A. A.); same locality, J. Esquirol, no. 2204, Sept. 1910, and J. Cavalerie, no. 3492, Aug. 1909.

Grewia Esquirolii and Celastrus euonymoides are apparently manuscript names published only as synonyms of G. glabrescens; the name C. euonymoides appears on the label of Cavalerie's no. 3513, but on Esquirol's no. 3189 no name appears except Euonymus which is crossed out. Esquirol's no. 2204 is named G. glabrescens Benth. in Léveillé's handwriting, while Cavalerie, no. 3492, bears no name except "Grewia?", but was placed in the cover of G. glabrescens.

I am following Handel-Mazzetti in considering *Grewia glabrescens* identical with *G. biloba*. Don describes the leaves as smooth above, but pubescent beneath, which agrees with Bentham's description of the leaves as glabrous or sparingly sprinkled with a few short hairs on the upper side and dotted with a minute stellate pubescence underneath, while Bunge describes the leaves of his *G. parviflora* as "supra hispidulis, subtus stellato-canescentibus." The latter, therefore, becomes a variety of *G. biloba*. The two varieties, however, cannot be sharply separated and are closely connected by intermediate forms. There is also a difference in the shape; typical *G. biloba* has the leaves generally longer, oblong-oval to oblong-lanceolate, while those of var. *parviflora* are shorter and broader, ovate or oval, and usually smaller.

Grewia biloba var. parviflora (Bge.) Handel-Mazzetti, Symb. Sin. vii. 612 (1933).

Grewia biloba Burret in Notizbl. Bot. Gart. Mus. Berlin, 1x. 708 (1926). — Rehder in Jour. Arnold Arb. viii. 173 (1927).

Rubus umbellifer Léveillé in Fedde, Rep. Spec. Nov. vi. 111 (1908); in Bull. Acad. Intern. Géog. Bot. xix. Mém. 16 (Ronces Chin. Jap.) (1909). — Synon. nov.

Grewia Chanetii Léveillé in Fedde, Rep. Spec. Nov. x. 147 (1911).

CHINA. Hopei: Kia-chan, L. Chanet, no. 571, Aug. 1910 (holotype of G. Chanetii; photo. in A. A.); mont de Pong-chan, L. Chanet, June 15-16, 1910 (in herb. Léveillé sub G. Chanetii; photo. in A. A.). Yunnan: près Pin-tchouan, Jean Py in herb. Ducloux, no. 618, April 27, 1906, "fleurs jaunes" (holotype of Rubus umbellifer in Herb. Univ. Calif.; photo. in A. A.).

The specimen from Yunnan approaches the type, but is rather densely pilose above and most of the leaves are oval or elliptic. *Grewia Chanetii* had been already identified as *G. biloba* by Burrett (l. c.).

Grewia abutilifolia Ventenat apud Jussieu in Ann. Mus. Paris, IV. 92 (1804). — Burrett in Notizbl. Bot. Gart. Mus. Berlin, IX. 723 (1926).

Sterculia tiliacea Léveillé in Fedde, Rep. Spec. Nov. XII. 185 (1913); Fl. Kouy-Tchéou, 406 (1915). — Synon. nov.

China. K we i chou: canal d'eau en amont de Ouang-mou, J. Esquirol, no. 47, May 26, 1904, "arbrisseau, fl. jaunes" (holotype of Sterculia tiliacea; photo. in A. A.).

The leaves of the specimen cited are very broad, some even broader than long, about 9 cm. long and 10 cm. broad, and some show a slight tendency toward lobing, as in Henry's no. 9887p which was identified by Burrett (1. c.) with *G. abutilifolia*.

#### MALVACEAE

Abutilon indicum (L.) Sweet, Hort. Brit. 54 (1827). — Léveillé, Cat. Pl. Yun-Nan, 175 (1916).

Abutilon Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. XII. 185 (1913); Fl. Kouy-Tchéou, 272 (1914). — Synon. nov.

China. Kweichou: ouest de Lo-fou, J. Cavalerie, Nov. 1905 (holotype of A. Cavaleriei; photo. in A. A.).

**Urena lobata** Linnaeus, Spec. Pl. 692 (1753). — Léveillé, Fl. Kouy-Tchéou, 275 (1914); Cat. Pl. Yun-Nan, 176 (1916).

Abutilon Esquirolii Léveillé in Bull. Géog. Bot. xxiv. 252 (1914); Fl. Kouy-Tchéou, 272 (1914). — Synon. nov.

China. K w e i c h o u : Gou-réou, dans les herbages, rare, 700 m., J. Esquirol, no. 3668, Sept. 1912, "haut 1.5-2 m., fl. roses" (holotype of Abutilon Esquirolii; merotype in A. A.).

A form with ovate to orbicular-ovate undivided only sparingly denticulate leaves and the flowers clustered at the apex of the branches, not axillary along the stems.

**Hibiscus Labordei** Léveillé in Fedde, Rep. Spec. Nov. XII. 184 (1913); Fl. Kouy-Tchéou, 274 (1914).

China. K we i chou: montagne de Kao-po (Tsin-gay), J. Laborde in herb. Bodinier, Sept. 10, 1899 "grand arbuste" (holotype; photo. in A. A.).

This species I have not been able to identify with any of the described species; it seem to be nearest to *H. mutabilis* L. from which it differs chiefly in the 3-lobed leaves, the short pedicels 1-1.5 cm. long, and in the dense ochraceous tomentum of the calyx which is about as long as the 6 linear-lanceolate bracts.

Hibiscus crinitus (Wall.) G. Don, Gen. Syst. 1. 480 (1831).

Hibiscus cancellatus Roxburgh, Hort. Bengal. 51 (1814), nom. nud.; Fl. Ind. 111. 201 (1832). — Hochreutiner in Ann. Jard. Bot. Genève, Iv. 149 (1900). — Léveillé, Cat. Pl. Yun-Nan. 175 (1916). — Non Linnaeus f.

Hibiscus Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. XII. 184 (1913); Fl. Kouy-Tchéou, 274 (1914). — Synon. nov.

Hibiscus Bodinieri Léveillé, 1. c. (1913); 1. c., 273 (1914); Cat. Pl. Yun-Nan, 175 (1916). — Synon. nov.

China. K w e i c h o u: montagnes de Lo-fou, *J. Cavalerie*, no. 2584, Nov. 1905 (holotype of *H. Cavaleriei*; photo. in A. A.); Hoakiang, *J. Cavalerie*, no. 3959, July 1912 (cited in Fl. Kouy-Tchéou under *H. Cavaleriei*; dupl. in A. A.); Kouy-yang, descente du fleuve, *E. Bodinier*, no. 503, July 27, 1900, "fl. jaunes" (syntype of *H*.

Bodinieri; merotype in A. A.); without locality, J. Esquirol, no. 89, June 13, 1904 (syntype of H. Bodinieri; photo. in A. A.).

Hibiscus cancellatus Roxb. is a later homonym of H. cancellatus Linnaeus f. Suppl. 311 (1781) = Pavonia cancellata (L. f.), and also a later synonym of H. crinitus (Wall.) G. Don, since its valid publication dates from 1832; therefore, H. crinitus (Wall.) G. Don is the correct name for this species.

Hibiscus sagittifolius Kurz var. septentrionalis Gagnepain in Lecomte, Fl. Gén. Indo-Chine, 1. 435 (1910); Handel-Mazzetti, Symb. Sin. vii. 609 (1933).

Hibiscus Bodinieri var. brevicalyculata Léveillé in Fedde, Rep. Spec. Nov. XII. 184 (1913). — Synon. nov.

Hibiscus Esquirolii Léveillé, l. c. (1913); Fl. Kouy-Tchéou, 274 (1914).

Hibiscus bellicosus Léveillé, Fl. Kouy-Tchéou, 273 (1914).

CHINA. K we i chou: Kouy-yang, descente du fleuve, E. Bodinier, no. 504, July 27, "fl. rouge" (syntype of H. Bodinieri var. brevicalyculata and holotype of H. bellicosus; photo. in A. A.); same locality, J. Esquirol, no. 90, June 13, 1904, "fl. rose" (syntype of H. Bodinieri var. brevicalyculata; photo. in A. A.); montagnes près de Houa-kiang, J. Cavalerie, no. 2047, June 1904, and J. Esquirol, no. 531, June 1905 (syntypes of H. Esquirolii; photo. in A. A.).

Hibiscus Esquirolii has been already referred to this variety by Handel-Mazzetti (l. c.). Hibiscus bellicosus was based by Léveillé on his H. Bodinieri var. brevicalyculata.

#### STERCULIACEAE

Eriolaena malvacea (Lévl.) Handel-Mazzetti, Symb. Sin. vii. 613 (1933).

Sterculia malvacea Léveillé in Fedde, Rep. Spec. Nov. XII. 185 (1913).

Eriolaena sterculiacea Léveillé, Fl. Kouy-Tchéou, 405 (1915).

Eriolaena szemaoensis Hu in Jour. Arnold Arb. v. 230 (1924); in Contrib. Biol. Lab. Sci. Soc. China, 1 no. 2, p. 1 (1925).—
Synon. nov.

CHINA. K we ichou: Kiao-ta, 750 m., J. Esquirol, no. 2185, June 1910 (holotype of Sterculia malvacea and Eriolaena sterculiacea; photo. in A. A.). Y u n n a n: Szemao, western mountains, 5000 ft., A. Henry, no. 11873 (flowers) "tree 15 ft." (holotype of E. szemaoensis; isotype in A. A.); same locality, A. Henry, nos. 12506, 12506A, 12506B (fruit) "tree 15 ft." (paratypes of E. szemaoensis; isotypes in A. A.).

When transferring his *Sterculia malvacea* to *Eriolaena* Léveillé changed the specific epithet to "sterculiacea." The same species was found by Handel-Mazzetti on the road from Yunnan-fu to Talifu (no. 8649).

Reevesia pubescens Masters in Hooker f., Fl. Brit. Ind. 1. 364 (1874). — Rehder & Wilson in Sargent, Pl. Wilson. 11. 376 (1915). — Léveillé, Cat. Pl. Yun-Nan, 267 (1917). — Anthony in Notes Bot. Gard. Edinb. xv. 124 (1926). — Rehder in Jour. Arnold Arb. x. 196 (1929).

Recvesia Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. IV. 330 (1907); Fl. Kouy-Tchéou, 405 (1915).

Capparis masaikai Léveillé, Fl. Kouy-Tchéou, 59 (1914), pro parte, quoad Cavalerie, no. 3347 [= 2347].

Reevesia thyrsoidea Léveillé, Fl. Kouy-Tchéou 405 (1915). — Non Lindley.

CHINA. K we i chou: route de Pin-fa à Kouy-yang, bois, très rare, J. Cavalerie, no. 2347, May 20, 1905 (holotype of R. Cavaleriei and syntype of Capparis masaikai; merotype in A. A.).

Reevesia Cavaleriei was first identified with R. pubescens by Anthony (1. c.), who also reduced R. sinica Wils., R. siamensis Craib and Eriolaena yunnanensis W. W. Sm. to synonyms of R. pubescens. Léveillé in his Flore du Kouy-Tchéou made the same number, erroneously cited as no. 3347, one of the two syntypes of his Capparis masaikai.

Helicteres glabriuscula Wallich, Num. List. no. 1185 (1828), nom. nud. — M. T. Masters in Hooker f. Fl. Brit. Ind. 1. 366 (1874).

Corchorus Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. x. 437 (1912). — Synon. nov.

Helicteres Cavalerici Léveillé in Fedde, Rep. Spec. Nov. XII. 534 (1913); Fl. Kouy-Tchéou, 405 (1915).

China. K we ich ou: Lo-fou, J. Cavalerie, no. 3470, March 1909 (holotype of Corchorus Cavaleriei and Helicteres Cavaleriei; merotype in A. A.); Goui-reou, J. Esquirol, no. 3180, Dec. 14, 1911, "tout petit frutex" (cited under Helicteres Cavaleriei; photo. in A. A.).

This Himalayan species occurs also in Yunnan (Henry, nos. 11185 and 12218A).

### DILLENIACEAE

Actinidia purpurea Rehder in Sargent, Pl. Wilson. II. 378 (1915).

Actinidia arguta Planch. (A. rufa Miq.) ex Miq. var. Dunnii
Léveillé, Cat. Pl. Yun-Nan, 269 (1917).

Léveillé cites "arguta Dunn" as synonym of his var. Dunnii without description or reference to specimens. Dunn's A. rufa var. arguta is

based on A. arguta Miq. and its range is given as including Manchuria, Japan, Korea and China southwest to Yunnan. I assume that Léveillé's intention was to separate as a distinct variety the Yunnan specimens cited by Dunn under var. arguta. Dunn cites three specimens from Yunnan, Delavay, no. 4264 and Henry, nos. 9694 and 11008; the first I have not seen, the two Henry specimens belong to my A. purpurea, no. 11008 being cited as a paratype.

Actinidia Fortunati Finet & Gagnepain in Bull. Soc. Bot. France, LIII, 574, fig. 1, 9-16, (1906). — Léveillé, Fl. Kouy-Tchéou, 413 (1915).

Actinidia Dielsii Léveillé in Fedde, Rep. Spec. Nov. XIII. 175 (1914).

CHINA. K w e i c h o u : Pin-fa, montagnes, J. Cavalerie, no. 12 bis, June 3, 1902 (syntype of A. Dielsii; photo. in A. A.); same locality, J. Cavalerie, no. 1746, in 1904 (syntype of A. Dielsii; ex Léveillé).

Actinidia Dielsii was referred to A. Fortunati by Léveillé in his Flore du Kouy-Tchéou.

Actinidia Rubus Léveillé in Fedde, Rep. Spec. Nov. XII. 282 (1913); Cat. Pl. Yun-Nan, 270 (1917).

China. Y u n n a n: bois de Sen-choui-lin (Tchao-tong), alt. 2000 m., E. E. Maire, June 1912 "arbuste grimpant, rameaux ciliés, fl. jaunes" (holotype; merotype in A. A.).

This species seems nearest to A. holotricha Fin. & Gagnep. from which it differs in its larger, ovate to obovate acuminate leaves to 10 cm. long, sparingly setose above, hispid on the midrib beneath and slightly so on the lateral veins, in the 5-6 cm. long petioles and in the sepals being glabrous outside.

Actinidia lanata Hemsley in Ann. Bot. 1x. 146 (1895).

Ficus hirtaeformis Léveillé & Vaniot in Mem. Acad. Ci. Art. Barcelona, ser. 3, vi. 150 (reprint, p. 12) (1907); in Fedde, Rep. Spec. Nov. iv. 84 (1907); Fl. Kouy-Tchéou, 430 (1915). — Synon. nov. Mespilus Esquirolii Léveillé in Fedde, Rep. Spec. Nov. XII. 188: (1913); Fl. Kouy-Tchéou, 348 (1915). — Synon. nov.

CHINA. K we i chou: Pin-fa, montagnes, J. Cavalerie, no. 1593, in 1904 (holotype of Ficus hirtaeformis; photo. in A. A.); Pin-fa, ruisseau des barbares, J. Esquirol, no. 409, June 1905, "arbrisseau sarmenteux, fl. jaunâtre" (syntype of Mespilus Esquirolii; photo. in A. A.); Pin-fa, Niang-ouong, bois, montagnes, J. Esquirol, no. 2346, June 8, 1905, "fl. jaune paille, orange" (syntype of M. Esquirolii; photo. in A. A.).

According to Handel-Mazzetti (Symb. Sin. vii. 392) Cavalerie, no. 4346, from Pin-fa (in herb. Paris) was determined by Gagnepain as A. lanata.

### THEACEAE

Thea Costei (Lévl.), comb. nov.

Camellia Costei Léveillé in Fedde, Rep. Spec. Nov. x. 148 (1911); Fl. Kouy-Tchéou, 414 (1915). — C. P. Cohen Stuart in Bull. Gard. Bot. Buitenz. sér. 3, 1. 239, 244 (1919).

Thea chinensis Seem. var. androxantha Léveillé, Cat. Pl. Yun-Nan, 271 (1917). — Synon. nov.

China. K w e i c h o u: Hang-tong, J. Esquirol, no. 303, Jan. 26, 1905, "arbrisseau, fl. très blanches, feuillage très vert" (holotype of Camellia Costei; merotype in A. A.); Pin-fa, J. Cavalerie no. 785, March 6, 1902, "fl. blanches" (cited in Fl. Kouy-Tchéou under C. Costei; duplicate in A. A.). Y u n n a n: brousse de coteaux à Long-ky, alt. 500 m., E. E. Maire, May [1911-13], "petit arbre à branches delicates" (holotype of Thea chinensis var. androxantha; merotype in A. A.).

This species is closely related to *Th. cuspidata* Kochs from which it is chiefly distinguished by the thinner leaves with the veins beneath slightly elevated and by the filaments being united about one half. The specimen of *Th. chinensis* var. androxantha, however, resembles in the thicker texture of its leaves *Th. cuspidata*, but the stamens are united, at least partly, to about the middle.

Thea oleosa Loureiro, Fl. Cochinch. 339 (1790). — Merrill, Comm. Lour. Fl. Cochinch. (1921) MS.

Thea oleifera (Abel) Rehder & Wilson in Sargent, Pl. Wilson, 11. 393 (1915).

Thea podogyna Léveillé, Sert. Yunnan. 2 (1916); Cat. Pl. Yun-Nan, 271 (1917). — Synon. nov.

China. Y u n n a n: brousse de Tcheng-fong-chan, 800 m., E. E. Maire, May 1912, "grande arbuste, toujours vert, fl. blanches" (holotype of Th. podogyna; merotype in A. A.).

Thea Grijsii (Hce.) Kochs in Bot. Jahrb. xxvII, 591 (1900),

Thea Cavaleriana Léveillé, Cat. Pl. Yun-Nan, 271, in nota

(1917).— Synon. nov.

China. K w e i c h o u : Pin-fa, montagnes, J. Cavalerie, no. 757, Dec. 9, 1902, "fl. blanches, legèrement roses à l'extérieur" (holotype of Th. Cavaleriana; merotype in A. A.).

Thea Pitardii (Stuart) Rehder in Jour. Arnold Arb. v. 238 (1924).

Thea speciosa Pitard apud Diels in Notes Bot. Gard. Edinb. v. 285 (1912). — Non Kochs.

Camellia japonica Léveillé, Fl. Kouy-Tchéou, 414 (1915), tandem pro parte. — Non Linnaeus.

Thea Mairei Léveillé, Sert. Yunnan. 2 (1916); Cat. Pl. Yun-Nan, 271 (1917). — Synon. nov.

China. K w e i c h o u: Tou-chan, J. Cavalerie in herb. Bodinier, no. 2594, Aug. 1912 (cited in Fl. Kouy-Tchéou under C. japonica, isotype of Th. speciosa Pitard apud Diels.). Y u n n a n: collines de Tchen-fong-chan, 550 m., E. E. Maire, May 1912 "arbre de taille moyenne, feuilles luisantes, fl. simple, rouge-vif" (holotype of Th. Mairei; merotype in A. A.).

The specimens cited by Léveillé under Camellia japonica belong without doubt all to Thea Pitardii as does Cavalerie's no. 2594 which is a duplicate of the type of Th. Pitardii in the Paris Herbarium. Thea japonica (L.) Nois is not found in western China.

As already pointed out by Dr. Handel-Mazzetti (Symb. Sin. vII. 393) Thea Pitardii is exceedingly variable in the shape and size of the leaves, in the pubescence of the sepals and also in the color of the flowers, which vary from bright red to white. In the typical form the leaves are generally oblong, 5-10 cm. long and acuminate to long acuminate with the veins above slightly raised and less so beneath; the sepals are densely silky outside and also the petals are more or less silky outside. As an extreme form the following may be distinguished:

## Thea Pitardii var. lucidissima (Lévl.), comb. nov.

Thea Camellia Lévl. var. lucidissima Léveillé, Cat. Pl. Yun-Nan, 270 (1917).

CHINA. Y u n n a n: montagnes arides herbeuses, autour de Tong-chouan, 2700 m., E. E. Maire, Feb. 1912 "arbuste toujours d'un vert luisant" (holotype of Th. Camellia var. lucidissima; merotype in A. A.).

This variety differs from the typical form in the smaller leaves, usually 3.5-6 cm. long, acute or even obtusish, of thicker texture and usually very lustrous with the veins above mostly impressed, and in the glabrous or glabrescent bracts, sepals and petals. The following specimens in this herbarium from Yunnan seem referable to this variety: Rock, nos. 3045, 3105, 7910, 7941, 8062, 8169, 8469, 11721, 11722 and G. Forrest, nos. 8024 and 26285. In other specimens the leaves are like those of the typical form but the sepals and petals are glabrous or nearly so as in Rock nos. 8237, 8239, 11673 and 11716; these are probably better referred to the type and may constitute a distinct form.

Eurya nitida Korthals, Kruidk. in Verh. Nat. Geschied. Bot. 115, t. 7 (1840). — Handel-Mazzetti, Symb. Sin. vii. 399 (1831).

Rapanea aurea Léveillé in Fedde, Rep. Spec. Nov. x. 376 (1912); Fl. Kouy-Tchéou, 288 (1914). — Synon. nov.

CHINA. K we i chou: Pin-fa, montagne, J. Cavalerie, no. 839, March 10, and no. 841, Feb. 27, 1902 "fl. blanc-sombres ou blanches" (syntypes of Rapanea aurea; photo. in A. A.).

The two specimens differ slightly in the shape of the leaves; no. 839 has oblong leaves with a short but distinct obtuse acumen, while no. 841 has somewhat broader generally elliptic-oblong and not or hardly acuminate leaves.

### GUTTIFERAE

Hypericum patulum Thunberg, Fl. Jap. 295 (1784). — Léveillé in Bull. Soc. Bot. France, Liv. 591 (1907); Cat. Pl. Yun-Nan, 133 (1916); in Mem. Acad. Ci. Barcelona, ser. 3, XII. 553 (Cat. Pl. Kiang-Sou, 13) (1916).

Hypericum Argyi Léveillé & Vaniot in Bull. Soc. Bot. France, Liv. 591 (1907); Fl. Kouy-Tchéou, 198 (1914); in Mem. Acad. Ci. Barcelona, ser. 3, x11. 553 (Cat. Pl. Kiang-Sou, 13 (1916).— Synon. nov.

CHINA. K i a n g s u : without precise locality, *Ch. d'Argy* [1846-66] (holotype of *H. Argyi*; photo. in A. A.). K w e i c h o u : Hoang-tsao-pa, près des cours d'eaux, *J. Esquirol*, no. 1552, June 1909 (cited in Fl. Kouy-Tchéou under *H. Argyi*; merotype in A. A.).

Hypericum Argyi has been already referred to H. patulum by G. Koidzumi according to a note on the type specimen. In his key Léveillé (l. c.) distinguishes H. patulum from H. Argyi chiefly by the acute sepals, but they are obtuse in typical H. patulum; they are, however, acute or acutish in H. patulum var. Henryi Veitch.

Hypericum Hookerianum Wight & Arnott, Prodr. Fl. Ind. 99 (1834). — Léveillé in Bull. Soc. Bot. France, Liv. 590 (1907); Cat. Pl. Yun-Nan, 133 (1916).

Hypericum Henryi Léveillé & Vaniot in Bull. Soc. Bot. France, Liv. 590 (1907). — Léveillé, Fl. Kouy-Tchéou, 198 (1914); Cat. Pl. Yun-Nan, 133 (1916). — Synon. nov.

CHINA. K we i chou: environs de Kouy-yang, partout dans les montagnes, E. Bodinier, no. 1933, Aug. 1897, "gr. fleurs jaunes" (holotype of H. Henryi; photo. in A. A.).

The type specimen of H. Henryi cited above bears the name H. patulum with a note "d'après Dr. Henry" in Bodinier's handwriting, and the name H. Henryi does not appear on the sheet. Two other specimens, however, both from Yunnan and collected by E. E. Maire, bear the name H. Henryi in Léveillé's handwriting, but these are not identical with the type of H. Henryi; one of these, in the Léveillé

herbarium, is from Tong-tchouan, and the other, in the Herbarium Bonati, "Maire, no. 402, collines, Mai 1905," is without exact locality. Both belong apparently to *H. patulum* var. *Henryi* Veitch, though the leaves resemble those of var. *uralum* (Don) Koehne, but the flowers are quite large, 3-3.5 cm. across and the sepals are acutish to acuminate.

Hypericum longifolium Léveillé in Bull. Agric. Sci. Sarthe, xxxix. 322 (Bouquet Fl. Chine, 7) (1904); in Fedde, Rep. Spec. Nov. vi. 372 (1909); in Bull. Soc. Bot. France, Liv. 590 (1907); Fl. Kouy-Tchéou, 199 (1914).

China. K w e i c h o u : mont du Collège, dans la brousse, près de Ke-ma-tong, E. Bodinier, no. 1774, Aug. 9, 1897 "fl. jaunes" (holotype; photo. in A. A.).

I have not been able to identify  $Hypericum\ longifolium\$ with a described species. It is similar to  $H.\ chinenese\$ Lam., but differs in the quadrangular stem, linear-lanceolate gradually acuminate leaves, ovate obtuse sepals and shorter style more deeply divided at the apex, sometimes to 1/3. Léveillé enumerates the species among the frutescent ones, but it has the aspect and the stem of an herbaceous species.

Hypericum kouytchense Léveillé in Bull. Soc. Agric. Sarthe, xxxix. 322 (Bouquet Fl. Chine 7) (1904); in Bull. Soc. Bot. France, Liv. 592 (1907); in Fedde, Rep. Spec. Nov. vi. 375 (1909); Fl. Kouy-Tchéou, 198 (1914). — Rehder in Jour. Arnold Arb. x. 134 (1929).

China. K we i chou: mont de Lou-tsong-koan, cc. dans la montagne, E. Bodinier, no. 1603, May 31, 1897, "belles fleurs jaunes" (holotype; merotype in A. A.).

This species belongs to the section Norysca and seems intermediate between *H. lysimachioides* Wall. and *H. patulum* Thbg. It has been also found near Wushan, eastern Szechuan, and plants raised from seed collected by E. H. Wilson in that locality are in cultivation. At the place cited above I published a description based chiefly on these cultivated plants.

### FLACOURTIACEAE

**Xylosma racemosum** (Sieb. & Zucc.) Miquel in Ann. Mus. Bot. Lugd.-Bat. 11. 155 (1865-66). — Léveillé, Fl. Kouy-Tchéou, 52 (1914); Cat. Pl. Yun-Nan, 20 (1915).

Crataegus Academiae Léveillé in Mem. Acad. Ci. Art. Barcelona, ser. 3, x11. 559 (Cat. Pl. Kiang-sou, 19) (1916). — Synon. nov.

CHINA. K wangsi: Souo-se, Ch. d'Argy, Sept. 1859? "arbuste verte" (holotype of Crataegus Academiae; merotype in A. A.).

The specimen cited above represents the typical form with glabrous ovate serrulate leaves. I am following Handel-Mazzetti (Symb. Sin. VII. 383) in rejecting as a nomen confusum, Loureiro's name *Croton congestum* on which Merrill based the combination *X. congestum*, since the fruit described is that of an euphorbiaceous plant and the habit given as suffruticose which does not agree with *Xylosma*.

Xylosma racemosum var. kwangtungense (Metcalf), comb. nov. Xylosma Dunniana Léveillé in Fedde, Rep. Spec. Nov. 1x. 455 (1911); Fl. Kouy-Tchéou, 52 (1914). — Synon. nov.

Flacourtia Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. 1x. 457 (1911); Fl. Kouy-Tchéou, 51 (1914). — Synon. nov.

Xylosma racemosa Léveillé, Fl. Kouy-Tchéou, 52 (1914), vix Miq. Xylosma congestum var. kwangtungense Metcalf in Jour. Arnold Arb. XII. 272 (1931).

China. K w e i c h o u : Tsin-gai, J. Cavalerie, no. 1151, July 15, 1903 (holotype of X. Dunniana; merotype in A. A.); Pin-fa, bois, assez rare, J. Cavalerie, no. 3327, July 1908, "arbre épineux, fl. jaunes, inodores" (holotype of Flacourtia Cavaleriei; merotype in A. A.).

The specimens cited above were referred to by Dr. H. Sleumer (in litt.) to the var. kwangtungense with which they agree in their elliptic-oblong to lanceolate-oblong rather coarsely serrate leaves.

Carrierea Dunniana Léveillé in Fedde, Rep. Spec. Nov. 1x. 458 (1911); Fl. Kouy-Tchéou, 51 (1914). — Gilg in Engler & Prantl, Nat. Pflanzenfam. ed. 2, xxi. 444 (1925).

China. K w e i c h o u : route de Pin-fa à Tou-yun, *J. Cavalerie*, no. 3001, Aug. 2, 1908, "arbre à fleurs blanches" (holotype; merotype in A. A.).

Carrierea Dunniana has been already enumerated as a valid species by Gilg (l. c.). It is easily distinguished from C. calycina Franch. by the many-flowered paniculate inflorescence, the much smaller sepals not cordate at the base, and the ovate-oblong to oblong rather long acuminate leaves. It has been collected also by Y. Tsiang (no. 5644) near Tuyun and distributed as C. calycina. As in C. calycina the flowers are dioecious, Cavalerie's no. 3001 being pistillate, while Tsiang's no. 5644 is staminate. The ovary of the pistillate flowers is one half to one third as long as the sepals which are about 8 mm. long and is surrounded at the base by anther-bearing staminodes about 1/3 as long as the ovary; the styles are longer and slenderer than in C. calycina, about half as long as the ovary. The stamens in the staminate flowers are very numerous and unequal, the longest about one third as long as the sepals, and bear in the middle a minute rudimentary

ovary. The structure of the flowers of *C. calycina* is similar, but in the staminate flowers the rudimentary ovary is lacking or occasionally lacking, at least there was none in a flower examined of Wilson's Veitch Exped. no. 1104. The staminate inflorescence may be occasionally paniculate by its lower branches becoming 3-flowered, while the pistillate inflorescence has fewer flowers and may become reduced to one or two flowers as in a specimen from Tchen-kéou-tin collected by Farges. Among the material in this herbarium I have seen no flower like that figured by Franchet with his original description, but the genus may be polygamous and plants with hermaphrodite flowers may occur.

### STACHYURACEAE

Stachyurus yunnanensis Franchet in Jour. de Bot. XII. 253 (1898). — Léveillé, Cat. Pl. Yun-Nan, 270 (1917).

Stachyurus Esquirolii Léveillé, Fl. Kouy-Tchéou, 416 (1915). — Synon. nov.

CHINA. K we i chou: Than-lo, 1100 m., J. Esquirol, no. 3517, March 20, 1912, "fleurs blanches" (holotype of S. Esquirolii; merotype in A. A.).

### THYMELAEACEAE

Wikstroemia indica (L.) C. A. Meyer in Bull. Acad. Sci. St. Pétersb. sér. 2, 1. 358 (1843).

Wikstroemia Valbrayi Léveillé, Fl. Kouy-Tchéou, 417 (1915); Cat. Ill. Pl. Seu-Tchouen, 199, t. 63 (1918) MS.—Rehder in Sargent, Pl. Wilson. II. 538 (1916).—Synon. nov.

CHINA. K w e i c h o u: Tsin-gay, mont., J. Cavalerie, no. 1261, Aug. 4, 1903, "fl. jaunes" (syntype of W. Valbrayi; photo. in A. A.); route de Pin-fa à Tin-fan, J. Cavalerie, no. 1865, Nov. 1904 (syntype of W. Valbrayi; photo. in A. A.).

Wikstroemia indica has been collected in Kweichou also by Y. Tsiang (no. 7150), by R. C. Ching in Kwangsi (nos. 6084 and 8172) and by Handel-Mazzetti (no. 10895) who also collected it in Hunan (no. 11297). Handel-Mazzetti cites Cavalerie, no. 1261, a syntype of W. Valbrayi, under W. indica, but does not quote Léveillé's name as a synonym.

### Wikstroemia Vaccinium (Lévl.), comb. nov.

Lonicera Vaccinium Léveillé, Fl. Kouy-Tchéou, 64 (1914).

Frutex ramulis gracilibus sericeo-strigosis, vetustioribus nigropurpureis. Folia opposita, decidua, breviter petiolata, elliptica vel ovato-elliptica, 5-10 mm. longa, apice obtusiuscula, basi late cuneata, supra glabra, subtus sparse strigosis, utrinque viridia, venis utrinsecus circiter 3; petioli sericeo-strigosi, vix 1 mm. longi. Flores pauci in spica congesta terminali, pedunculo brevissimo vel in fructu ad 5 mm. longo; perianthii tubus extus sericeo-strigosus, 4 mm. longus, intus glaber, lobis 4 ovatis vix 1 mm. longis, antherae 4 (?), subsessiles; ovarium stipitatum, apice pilis setosis stylum brevem, obtegentibus ceterum glabrum, stigmate capitato; disci squama apice dentata. Fructus ellipsoideus, 4 mm. longus, glaber.

China. K we i chou: Pin-fa, très hautes montagnes, J. Cavalerie, no. 26, May 1902 "fl. roses" (holotype of Lonicera Vaccinium; merotype in A. A.).

This species seems closely related to *W. monnula* Hance, from which it is easily distinguished by its small obtusish leaves not glaucescent beneath and the longer fruit attenuated at the end. The only flower available for examination was still in bud and probably not fully grown; I noticed only 4 anthers in the flower, the upper whorl being apparently lacking. It may prove to be only a small-leaved variety of *W. monnula*, when more material is available. The species is also related to *W. sericea* Domke, but that species is much more densely silky-pubescent and has larger acute leaves.

I have given above a description of this species, since Léveillé (l. c.) merely says: "Lonicera Vaccinium Lévl. nov. sp. Habitus, aspectus, folia Vaccinii myrtillus; flores Lonicerae, minimi rosei."

Wikstroemia salicina (Lévl.) Léveillé & Blin in Sargent, Pl. Wilson. II. 535 (1916). — Léveillé, Cat. Pl. Yun-Nan, 272 (1917).

Daphne salicina Léveillé in Bull. Geog. Bot. xxv. 42 (1915).

CHINA. Y u n n a n: paturages du Ié-ma-tchouan, 3200 m., E. E. Maire, July 1912 (or 1913), "arbuste buissonnant, haut 1.50 m., fl. jaunes" (holotype of *Daphne salicina*; merotype in A. A.).

In his description under *Daphne*, Léveillé gives the date of collecting as 1912, but under *Wikstroemia* he writes 1913.

Daphne tangutica Maximowicz in Mél. Biol. xi. 309 (1881); in Bull. Acad. Sci. St. Pétersb. xxvii. 531 (1882).— Rehder in Jour. Arnold Arb. ix. 97 (1928).

Daphne Bodinieri Léveillé in Bull. Géog. Bot. xxv. 42 (1915); Cat. Pl. Yun-Nan, 271 (1917); non Léveillé (1914). — **Synon. nov.** Daphne Wilsonii Rehder in Sargent, Pl. Wilson. 11. 540 (1916).

China. Y u n n a n: haut plateau de Ta-hai-tse, E. E. Maire, May 1912 (holotype of D. Bodinieri; photo. in A. A.).

In 1916 Léveillé sent me fragments of the specimen cited above which I identified as D. Wilsonii; in consequence, Léveillé crossed out D. Bodinieri on his type specimen and labelled it D. Wilsonii. The

plant described by Léveillé under the same name the year before is a species of *Melodinus*.

Daphne papyracea Wallich apud Steudel, Nomencl. ed. 2, 1. 483 (1841), nomen. — Meisner in Denkschr. Regensb. Bot. Ges. III. 282 (1841). — Rehder in Sargent, Pl. Wilson. II. 546 (1916). — Léveillé, Cat. Pl. Yun-Nan, 272 (1917).

Daphne papyrifera Hamilton ex D. Don, Fl. Nepal. 68 (1825), pro synon. — Léveillé, Fl. Kouy-Tchéou, 416 (1915).

Daphne Mairei Léveillé in Bull. Géog. Bot. xxv. 41 (1915); Cat. Pl. Yun-Nan, 271 (1917). — Synon. nov.

Daphne Cavaleriei Léveillé, 1. c. 42 (1915); 1. c. (1917). — Synon. nov.

CHINA. Y u n n a n: sous bois des montagnes à Ta-tchai, 3000 m., E. E. Maire, April 1912, "arbrisseau toujours vert, haut 0.40 m., fl. roses" (holotype of D. Mairei; photo. in A. A.); brousse de Lan-ngitsin, 2600 m., E. E. Maire, March 1912, "arbuste toujours vert, fl. blanches odorantes" (holotype of D. Cavaleriei; photo. in A. A.).

As in the case of the preceding species Léveillé sent me in 1916 fragments of D. Mairei and D. Cavaleriei which I identified as D. papyracea and this name was added later by Léveillé to the type specimens of his two species. In his Catalogue des plantes du Yun-Nan, however, he lists both as distinct species and cites D. Martini as a synonym of D. papyracea.

Daphne Feddei Léveillé in Fedde, Rep. Spec. Nov. 1x. 326 (1911); Fl. Kouy-Tchéou, 416 (1915). — Rehder in Sargent, Pl. Wilson. 11. 547 (1916).

Daphne Martini Léveillé in Fedde, Rep. Spec. Nov. x. 369 (1912); Fl. Kouy-Tchéou, 416 (1915).

CHINA. K we i chou: without precise locality, J. Cavalerie, no. 101 (holotype of D. Feddei; photo. in A. A.); environs de Kouy-yang, mont du Collège, J. Chaffanjon in hb. E. Bodinier, no. 2076, Feb. 1898 (syntype of D. Martini; photo. in A. A.); environs de Gan-pin, grandes rocailles, L. Martin in hb. Bodinier, no. 2076, Feb. 1898 (syntype of D. Martini; photo. in A. A.); Yeou-lang, J. Esquirol, no. 775 (syntype of D. Martini; merotype in A. A.).

Bodinier no. 2076 represents a vigorous branch with many additional axillary inflorescences.

Daphne Esquirolii Léveillé in Bull. Géog. Bot. xxv. 42 (1915); Cat. Pl. Yun-Nan, 271 (1917).

Daphne leuconeura Rehder in Sargent, Pl. Wilson. 11. 548 (1916).

Daphne leuconeura var. Mairei Rehder & Léveillé in Sargent, Pl. Wilson. 11. 548 (1916). — Léveillé in Pl. Yun-Nan, 271 (1917).

Wikstroemia leuconeura (Rehd.) Domke in Notizbl. Bot. Gart. Mus. Berlin, x1. 363 (1932).

China. We stern Szech u an: Tung River valley, alt. 700 m., E. H. Wilson, Veitch Exped. no. 4431, May 1904, "3-4 ft., flowers yellow" (holotype of D. leuconeura in A. A.). Yunnan: monts derrière Mongkou, alt. 2000 m., E. E. Maire, March 1912 (holotype of Daphne Esquirolii and D. leuconeura var. Mairei; photo. and fragments in A. A.); in dumetis inter flum. Salween et Mekong, alt. 2500-3000 m., C. Schneider, no. 2614, Oct. 1914; on boulders and cliffs in the Mekong valley, alt. 4-5000 ft., Lat. 25° 16′ N., G. Forrest, no. 13716, April 1917, "shrub of 3-4 ft., flowers light orange yellow"; without precise locality, G. Forrest, no. 9895.

When Léveillé sent me a fragment of the specimen cited above with the suggestion that it should be named after E. E. Maire, I did not know of his previous publication of *Daphne Esquirolii* based on the same specimen. I referred it to my new species *D. leuconeura* as a variety, since the very young leaves had a slight pubescence and the whole aspect of the plant was different on account of the precocious flowering in March. All the other specimens cited above were collected later and have fully developed leaves, but Forrest's specimens show below the terminal flowering inflorescence on the same sympodial shoot one or two older inflorescences with the flowers dropped which must have shown when in bloom a condition similar to Maire's specimen having young inflorescences with the lower small leaves scarcely half grown. The slight pubescence of these young leaves probably disappeared later entirely.

Léveillé in his Catalogue des plantes du Yun-nan cites both, D. Esquirolii and D. leuconeura var. Mairei, as valid names.

Stellera chamaejasme Linnaeus, Spec. Pl. 559 (1753).

Stellera Bodinieri Léveillé in Fedde, Rep. Spec. Nov. x. 369 (1912); Fl. Kouy-Tchéou, 417 (1915); Cat. Pl. Yun-Nan, 272 (1917).— Synon. nov.

Wikstroemia chamaejasme (L.) Domke in Notizbl. Bot. Gard. Mus. Berlin, x1. 362 (1932).

China. K we i chou: montagnes entre Hin-y-hien et Hin-y-fou, E. Bodinier, April 12, 1897, "belles fl. jaunes" (syntype of S. Bodinieri; photo. in A. A.). Y u n n a n: environs de Yun-nan-sen, haut des montagnes, March 19, 1897, montagnes entre Ma-kay et Se-hong, April 9, 1897, F. Ducloux, "belles fl. jaunes" (syntypes of S. Bodinier; photo. in A. A.).

The three specimens cited by Léveillé under his S. Bodinieri differ in the shape of their leaves; Bodinier's specimen has elliptic leaves

about 1 cm. broad, while Ducloux's specimens have narrower leaves, oblanceolate and about 5-6 mm. broad in one and linear and about 2 mm. broad in the other. All three are mounted on the same sheet.

I have here retained Wikstroemia and Stellera as distinct genera, though Domke gives good reasons for uniting the species of the section Chamaestellera and of Wikstroemia, while he recommends keeping Dendrostellera Van Tiegh. (C. A. Mey. as section of Stellera) as a distinct genus. In uniting the two genera Domke places all the species under Wikstroemia, because the latter is a nomen conservandum. This, however, is hardly in accordance with art. 46 of the Rules; if Domke's interpretation were correct, then all the species of Berberis would have to be transferred to Mahonia if the two genera are united, because the latter is a conserved name, and for the same reason, if Spiraea and Sorbaria should be again united, all the species of Spiraea should be transferred to Sorbaria. This would nullify the reason for which nomina conservanda were adopted, namely to avoid disadvantageous changes in nomenclature.

### LYTHRACEAE

Woodfordia fruticosa (L.) S. Kurz in Jour. As. Soc. Beng. xl.-2, p. 56 (1871). — Koehne in Engler, Pflanzenr. iv.-216, p. 79, fig. 12 (1903). — Handel-Mazzetti, Symb. Sin. vii. 593 (1933).

Lonicera androsaemifolia Léveillé, Fl. Kouy-Tchéou, 62 (1914).

CHINA. K weichou: Lo-fou, J. Cavalerie, no. 3487, March 1909 (holotype of Lonicera androsaemifolia; merotype in A. A.).

Lonicera androsaemifolia was first identified with Woodfordia fruticosa by Handel-Mazzetti (l. c.).

#### NYSSACEAE

Nyssa sinensis Oliver in Hooker's Icon. xx. t. 1964 (1891).

Daphniphyllum Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. 1x. 460 (1911); Fl. Kouy-Tchéou, 161 (1914). — K. Rosenthal in Engler, Pflanzenr. 1v.-147a, p. 15 (1919). — Synon. nov.

Microrhamnus Bodinieri Léveillé, Fl. Kouy-Tchéou, 341 (1915). — Synon. nov.

China. K we i chou: Pin-fa, montagnes, J. Cavalerie, nos. 2319, 2349, April 26 and May 30, 1905 "arbre de 7 ou 8 m." (syntypes of Daphniphyllum Cavaleriei, photos. in A. A.); same locality, J. Cavalerie, nos. 1093 and 2381, June 23, 1903 and June 15, 1905 (syntypes of Microrhamnus Bodinieri; photo. and merotype in A. A.).

This species has been collected in Kweichou also by Y. Tsiang (no. 5944) at Yunfushan, Tuyun, in 1930.

### ALANGIACEAE

Alangium Faberi Oliver in Hooker's Icon. xvIII. t. 1774 (1888). — Léveillé, Cat. Pl. Yun-Nan, 59 (1916). — Melchior in Notizbl. Bot. Gard. Mus. Berlin, x. 823 (1929).

Marlea Bodinieri Léveillé in Bull. Acad. Géog. Bot. xx11. 232 (1912); Fl. Kouy-Tchéou, 116 (1914). — Synon. nov.

China. K w e i c h o u: environs de Tou-chan, E. Bodinier & J. Cavalerie, no. 2666, June 27, 1899 (holotype of Marlea Bodinieri; photo. in A. A.).

The leaves of A. Faberi are almost invariably undivided, but a detached leaf of Bodinier's no. 2666 is deeply three-lobed; the only other specimen in this herbarium with a three-lobed leaf is Wilson's no. 4505.

Alangium Faberi var. perforatum (Lévl.), comb. nov.

Ardisia perforata Léveillé in Fedde, Rep. Spec. Nov. 1x. 462 (1911); Fl. Kouy-Tchéou, 283 (1914).

CHINA. K we i c h o u: environs de Gan-pin, dans les grandes rocailles près de la ville, rare, L. Martin & E. Bodinier, no. 1632, June 10, 1897, "fl. jaunâtres" (holotype of Ardisia perforata; photo. in A. A.).

This variety differs from the type in the much smaller and narrower leaves, 4-7 cm. long and 5-8 mm. broad, rounded to broad-cuneate and nearly equal at the base, more strongly veined beneath and in the rufous pubescence of the branchlets and inflorescence; it seems to be a more compact plant with rather short branchlets. Intermediate forms are R. C. Ching, no. 6337 from Kwangsi, and also judging from Handel-Mazzetti's description (Symb. Sin. vii. 684) Handel-Mazzetti, no. 10516, from Kweichou which I have not seen.

#### COMBRETACEAE

Combretum Wallichii De Candolle, Prodr. III. 21 (1828). — Exell in Sunyatsenia, I. 87 (1933).

Aspidopterys Cavaleriei Léveillé, Fl. Kouy-Tchéou, 271 (1914), quoad specimina citata; non Léveillé (1911).

Terminalia Mairei Léveillé, Cat. Pl. Yun-Nan, 35 (1915).

CHINA. K w e i c h o u: rochers à 30 kilom. au sud de Tin-fan, J. Cavalerie, no. 1882, Sept. 1904 (cited in Fl. Kouy-Tchéou under Aspidopterys Cavaleriei; photo. in A. A.); without precise locality, J. Esquirol, no. 712 (cited in Fl. Kouy-Tchéou under Aspidopterys Cavaleriei; photo. in A. A.). Y u n n a n: montagnes de Pe-long-tsin, 3200 m., E. E. Maire, June 1912 (holotype of Terminalia Mairei; merotype in A. A.). Terminalia Mairei was first identified with C. Wallichii by Exell (l. c.). As I pointed out under Aspidopterys Cavaleriei (Jour. Arnold Arb. xiv. 228) Léveillé cites in his Flore du Kouy-Tchéou the type of A. Cavaleriei under A. Dunniana and refers to A. Cavaleriei two fruiting specimens which do not belong to Aspidopterys, but represent Combretum.

### MYRTACEAE

Decaspermum fruticosum Forster, Char. Gen. 74, t. (1776).

Eugenia Esquirolii Léveillé in Fedde, Rep. Spec. Nov. 1x. 459 (1911); Fl. Kouy-Tchéou, 289 (1914). — Synon. nov.

Pirus Bodinieri Léveillé, Fl. Kouy-Tchéou, 350 (1915). — Synon. nov.

CHINA. K w e i c h o u : hauteur de Lao-ten, *J. Esquirol*, no. 82, June 1904 "grand arbrisseau, fl. roses" (holotype of *Eugenia Esquirolii*; merotype in A. A.); chemin de Lo-hou à Tong-tchéou, *J. Esquirol*, no. 3611, June 10, 1912 (holotype of *Pirus Bodinieri*; merotype in A. A.).

Eugenia Esquirolii and Pirus Bodinieri were determined as Decaspermum fruticosum by Dr. E. D. Merrill, to whom I had sent specimens for identification. This very widely distributed Malaysian species had not yet been recorded as far north as Kweichou. The only other Chinese specimens we have in this herbarium are all more southern and came from Hainan (Canton Christ. Coll. 8628 and Lingnan Univ. 15772), Kwangtung (Y. Tsiang 2186) and Szemao, S. Yunnan (Rock 2787 and 2832).

### MELASTOMACEAE

Melastoma normale D. Don, Prodr. Fl. Nepal. 220 (1825). — Guillaumin in Lecomte, Not. Syst. 11. 319 (1913). — Léveillé, Fl. Kouy-Tchéou, 277 (1914); Cat. Pl. Yun-Nan, 176 (1916). — Rehder & Wilson in Sargent, Pl. Wilson. 11. 421 (1915).

Melastoma Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. 111. 21 (1906).

Melastoma Esquirolii Léveillé, op. cit. VIII. 61 (1910).

CHINA. K w e i c h o u: route de Tchen-lin à Mou-you-se, J. Cavalerie, no. 2161, May 25, 1904 "fl. rose pale" (holotype of M. Cavaleriei; photo. in A. A.); without precise locality, J. Esquirol, no. 873, June 1906, "fl. rouge" (syntype of M. Esquirolii; photo. in A. A.); steppes, Hoang-tsao-pa, J. Esquirol, no. 1538, June 1909 (syntype of M. Esquirolii; photo. in A. A.).

Melastoma Cavaleriei and M. Esquirolii were first identified with M. normale by Guillaumin (l. c.).

Osbeckia crinita, Bentham apud Wallich, Num. List. no. 4066 (1829), nom. nud. — C. B. Clarke in Hooker f., Fl. Brit. Ind. 11. 517

(1879). — Guillaumin in Lecomte, Not. Syst. 11. 308 (1913. — Rehder & Wilson in Sargent, Pl. Wilson. 11. 422 (1915). — Non Naudin.

Melastoma Mairei Léveillé in Fedde, Rep. Spec. Nov. x1. 300 (1912).

Osbeckia crinita Benth. var. yunnanensis Cogniaux in De Candolle,
Monog. Phan. v11. 324 (1891). — Léveillé, Fl. Kouy-Tchéou, 277

(1914); Cat. Pl. Yun-Nan, 176 (1916).

China. Y u n n a n: Tchouan-se-pa, 650 m., vallées et collines herbeuses, E. E. Maire, June 1911, "fl. rouges, grandes" (holotype of Melastoma Mairei; photo. in A. A.).

Melastoma Mairei was first identified with Osbeckia crinita by Guillaumin (l. c.) who groups the Chinese plants under var. yunnanensis, but Handel-Mazzetti (Symb. Sin. vii. 597) says and I agree that there is no difference between the Indian and the Chinese plants.

### Plagiopetalum Esquirolii (Lévl.), comb. nov.

Sonerila Esquirolii Léveillé in Bull. Soc. Bot. France, Liv. 368 (1907); in Fedde, Rep. Spec. Nov. x1. 494 (1913).

Barthea Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. vIII. 61 (1910), pro parte, quoad Esquirol no. 215.

Barthea Blinii Léveillé in Fedde, Rep. Spec. Nov. x1. 494 (1913). Allomorphia Blinii (Lévl.) Guillaumin in Bull. Soc. Bot. France, Lx. 87 (1913). — Léveillé, Fl. Kouy-Tchéou 276, (1914).

Plagiopetalum quadrangulum Rehder in Sargent, Pl. Wilson. 111. 453 (1917).

Plagiopetalum serratum (Diels) Diels in Bot. Jahrb. Lxv. 100 (1932).

China. K w e i c h o u : Hoa-ouan-yao, J. Esquirol, no. 645, Aug. 1905 (holotype of Sonerila Esquirolii of 1907; ex Léveillé et ex Diels); without precise locality, J. Esquirol, no. 644, in 1906 (holotype of S. Esquirolii of 1913 ex Léveillé et ex Guillaumin); anfractuosités du pic de Ko-tchang-kéou, J. Esquirol, no. 215, Sept. 1904 "pied unique" (syntype of Barthea Cavaleriei and holotype of Barthea Blinii; photo. in A. A.).

I have not seen the types of the two specimens described independently as *Sonerila Esquirolii*, each name being based on a different type. Guillaumin (l. c.) cites only no. 644, the type of the *Sonerila Esquirolii* of 1913, but Diels (l. c.) cites both, 644 and also 645, the type of the *Sonerila Esquirolii* of 1907, which shows that the two are conspecific. Also Léveillé in Flore du Kouy-Tchéou cites both specimens under *Allomorphia Blinii*. Diels apparently overlooked the earlier publication and therefore based his new combination on his *Oxyspora serrata* of 1912.

Oxyspora paniculata De Candolle, Prodr. III. 123 (1828). — Léveillé, Cat. Pl. Yun-Nan, 176 (1916). — Diels in Bot. Jahrb. Lxv. 104 (1932).

Bredia soneriloides Léveillé in Fedde, Rep. Spec. Nov. 1x. 21 (1910). Sonerila Cavaleriei Léveillé in herb., l. c. (1910), pro synon. Brediae soneriloidis; x1. 494 (1913).

CHINA. K w e i c h o u : Lo-fou, J. Cavalerie, no. 3645, Oct. 1908 (holotype of Bredia soneriloides; ex Léveillé et ex Diels); près de chemin entre Pien-yang et Lo-fou, J. Cavalerie, no. 2681 (holotype of Sonerila Cavaleriei; ex Léveillé et ex Diels).

Bredia soneriloides and Sonerila Cavaleriei have been identified with Oxyspora paniculata by Diels (l. c.). Léveillé in 1910 quotes Sonerila Cavaleriei as a synonym of Bredia soneriloides, but in 1913 he describes it as a distinct species based on a different specimen, though the description reveals no characters to distinguish it from Bredia soneriloides. I have not seen the specimens cited above.

Blastus cochinchinensis Loureiro, Fl. Cochinch. 526 (1790).—Guillaumin in Bull. Soc. Bot. France, Lx. 89 (1913).—Léveillé, Fl. Kouy-Tchéou, 276 (1914).—Diels in Bot. Jahrb. Lxv. 105 (1932).

Blastus Marchandii Léveillé in Fedde, Rep. Spec. Nov. x1. 494 (1913).

CHINA. K we i chou: Tchang-loy, J. Esquirol, no. 967, June 1906 "arbrisseau, 3 m. hauteur, fleur rouge" (holotype of B. Marchandii; photo. in A. A.).

Blastus Marchandii was first identified with B. cochinchinensis by Guillaumin and this identification was adopted by Léveillé in his Flore du Kouy-Tchéou.

Blastus pauciflorus (Benth.) Guillaumin in Bull. Soc. Bot. France, LX. 90 (1913). — Léveillé, Fl. Kouy-Tchéou, 276 (1914). — Diels in Bot. Jahrb. LXV. 107 (1932).

Blastus Cavaleriei Léveillé & Vaniot in Mém. Soc. Nat. Sci. Nat. Cherbourg, xxxv. 395 (1906); in Fedde, Rep. Spec. Nov. 1v. 94 (1907).

Allomorphia Bodinieri Léveillé in Fedde, Rep. Spec. Nov. v. 100 (1908).

Bredia Bodinieri Léveillé, l. c. (1908), pro synon.

CHINA. K weichou: environs de Tou-chan, J. Cavalerie in hb. Bodinier, no. 2676, June 27, 1899, "arbrisseau, fl. roses" (holotype of B. Cavaleriei and of Allomorphia Bodinieri; photo. in A. A.).

Blastus Cavaleriei was first identified with B. pauciflorus by Guillaumin and cited by Léveillé in his Flore du Kouy-Tchéou under the latter name; both cite an additional number, 2170, from the same locality.

Blastus Dunnianus Léveillé in Fedde, Rep. Spec. Nov. 1x. 449 (1911); Fl. Kouy-Tchéou, 276 (1914). — Guillaumin in Bull. Soc. Bot. France, Lx. 91 (1913). — Diels in Bot. Jahrb. Lxv. 107 (1932).

China. K w e i c h o u: Ma-jo, rare, J. Cavalerie, no. 2971, July 1908, "arbrisseau, 1 à 2 m., fl. roses" (holotype; merotype in A. A.).

Notes on herbaceous Melastomaceae described by Léveillé and critically examined by Guillaumin and by Diels, of which I have seen no specimens, may be appended here.

Bredia Cavaleriei (Lévl.) Diels in Bot. Jahrb. Lxv. 110 (1932). — Handel-Mazzetti, Symb. Sin. vii. 599 (1933).

Barthea Cavaleriei Léveillé in Fedde, Rep. Spec. Nov. VIII. 61

(1910), quoad specimen Cavalerie, no. 1552.

Fordiophyton Cavaleriei (Lévl.) Guillaumin in Bull. Soc. Bot. France, Lx. 275 (1913), quoad typum. — Léveillé, Fl. Kouy-Tchéou, 276 (1914), quoad typum.

Fordiophyton Cavaleriei var. violacea Léveillé, Cat. Pl. Yun-Nan,

176 (1916), nom. nud.

China. Kweichou: Cavalerie, no. 1552 (holotype of Barthea Cavaleriei; ex Léveillé, Guillaumin, Diels).

Guillaumin mentions as probably belonging here *Barthea Esquirolii* Léveillé, Fl. Kouy-Tchéou, 276. 1914, pro synon. (*B. Cavaleriei* Léveillé in Fedde, Rep. Spec. Nov. viii. 61. 1910; pro parte, quoad specim. Esquirol, no. 1581), but Diels says that the specimen is too incomplete to be determined.

Bredia yunnanensis (Lévl.) Diels in Bot. Jahrb. Lxv. 111 (1932).

Blastus yunnanensis Léveillé in Fedde, Rep. Spec. Nov. x1. 300 (1912).

Blastus Mairei Léveillé, l. c. (1912).

Fordiophyton Cavaleriei (Lévl.) Guillaumin in Bull. Soc. Bot. France, Lx. 275 (1913), pro parte, quoad specim. e Yunnan.

CHINA. Y u n n a n: Long-ky, E. E. Maire, Aug. 1911 (holotype of Blastus yunnanensis; ex Léveillé, Guillaumin, Diels); same locality, E. E. Maire, June 1911 (holotype of Blastus Mairei; ex Léveillé, Guillaumin).

Diels (l. c.) expresses doubt that B. Mairei belongs here.

Fordiophyton Faberi Stapf in Ann. Bot. vi. 314 (1892). — Guillaumin in Bull. Soc. Bot. France, lx. 274 (1913). — Léveillé in Fl. Kouy-Tchéou, 276, (1914). — Diels in Bot. Jahrb. lxv. 114 (1932).

Bredia Cavaleriei Léveillé & Vaniot in Mém. Soc. Nat. Sci. Nat. Cherbourg, xxxv. 396 (1906); in Fedde, Rep. Spec. Nov. 1v. 94 (1907).

Oxyspora Cavaleriei Léveillé in herb., l. c. (1906) and (1907), pro synon. Brediae Cavaleriei.

Bredia Mairei Léveillé in Fedde, Rep. Spec. Nov. XI. 300 (1912). Blastus Lyi Léveillé, l. c. 301 (1912).

CHINA. Kweichou: Tou-chan, J. Cavalerie (holotype of

Bredia Cavaleriei; ex Léveillé, Guillaumin); Pin-fa à Tou-yun, J. Cavalerie, no. 2977 (holotype of Blastus Lyi, ex Léveillé, Guillaumin). Y u n n a n: Long-ky, E. E. Maire, June 1911 (holotype of Blastus Mairei; ex Léveillé, Guillaumin).

Phyllagathis Cavaleriei (Lévl. & Vant.) Guillaumin in Bull. Soc. Bot. France, Lx. 273 (1913). — Léveillé, Fl. Kouy-Tchéou, 277 (1914). — Diels in Bot. Jahrb. Lxv. 115 (1932).

Allomorphia Cavaleriei Léveillé & Vaniot in Mém. Soc. Nat. Cherbourg, xxxv. 394 (1906); in Fedde, Rep. Spec. Nov. IV. 94 (1907). Oxyspora Cavaleriei Léveillé in herb., 1. c. (1906 and 1907), pro synon. Allomorphiae Cavaleriei.

China. K w e i c h o u : J. Cavalerie, no. 2675 (syntype of Allomorphia Cavaleriei; ex Léveillé, Diels); J. Cavalerie, no. 56 (syntype of A. Cavaleriei, ex Léveillé, Guillaumin); J. Cavalerie, no. 246 (syntype of A. Cavaleriei; ex Léveillé, Diels).

### ARALIACEAE

Trevisia palmata (Roxb.) Visiani in Mem. Accad. Torin. ser. 2, IV. 262, pl. (1842). — Léveillé, Cat. Pl. Yun-Nan, 11 (1915).

Fatsia Cavaleriei Léveillé in Bull. Géog. Bot. xxiv. 144 (1914); Fl. Kouy-Tchéou, 34 (1914). — Synon. nov.

CHINA. K we i chou: Houa-kiang, J. Cavalerie, no. 2144, June 6, 1904, "h. 3 m." (holotype of Fatsia Cavaleriei; photo. in A. A.).

Tetrapanax papyrifera (Hook.) K. Koch in Wochenschr. Gaertn. Pflanzenk. II. 371 (1859).

Fatsia papyrifera (Hook.) Nicholson, Ill. Dict. Gard. II. 3 (1887). — Léveillé, Fl. Kouy-Tchéou, 34 (1914); Cat. Pl. Yun-Nan, 11 (1915).

Aralia Mairei Léveillé in Fedde, Rep. Spec. Nov. XIII. 342 (1914); Fl. Kouy-Tchéou, 34 (1914); Cat. Pl. Yun-Nan, 11 (1915).— Synon. nov.

China. K w e i c h o u : Ting-tsao, J. Esquirol, no. 678 (cited in Fl. Kouy-Tchéou under Aralia Mairei; ex Léveillé). Y u n n a n : vallée de Lin-kiang-ki, 700 m., E. E. Maire, Nov. 1913, "arbuste poreux à tronc denudé, haut 1.50 m., feuilles terminales, tomenteuses, blanches en dessous, fl. grises, faisceaux de grappes dressés" (holotype of A. Mairei; merotype in A. A.).

Schefflera Delavayi (Franch.) Harms in Bot. Jahrb. XXIX. 486 (1900).

Heptapleurum Delavayi Franchet in Jour. de Bot. x. 307 (1896). — Léveillé, Cat. Pl. Yun-Nan, 11 (1915).

Heptapleurum Dunnianum Léveillé in Fedde, Rep. Spec. Nov. XI. 295 (1912); Fl. Kouy-Tchéou, 35 (1914). — Synon. nov.

CHINA. K w e i c h o u : environs de Kouy-yang, dans la montagne près du Collège, E. Bodinier, no. 2506, Sept. 1898 (holotype of H. Dunnianum; photo. in A. A.).

Léveillé compares his *Heptapleurum Dunnianum* with *H. Delavayi* Franch. and says it differs from it in "foliis dimorphis usque 7-foliolatis membranaceis nec lucidis," but all these characters apply as well to *H. Delavayi*.

Schefflera Bodinieri (Lévl.) Rehder in Jour. Arnold Arb. XI. 166 (1930).

Heptapleurum Bodinieri Léveillé in Fedde, Bull. Géog. Bot. XXIV. 144 (1914); Fl. Kouy-Tchéou, 35 (1914).

CHINA. K w e i c h o u : district de Tsin-gay, vallée de Kia-latchang, J. Laborde in herb. Bodinier, no. 2459, Dec. 21, 1897, "grand arbuste" (syntype; merotype in A. A.); environs de Kouy-yang, mont du Collège, E. Bodinier, Feb. 17 and Sept. 1898 (syntypes; ex Léveillé); route de Pin-fa à Kouy-tin, J. Cavalerie, no. 3098 in part, Dec. 4, 1902 (syntype; ex Léveillé); Long-ly, J. Cavalerie, nos. 1567 and 3098 in part, Sept. 1907 (cited in Fl. Kouy-Tchéou; duplicate of no. 1567 and photo. of no. 3098 in A. A.).

Schefflera elliptica (Bl.) Harms in Engler & Prantl, Nat. Pflanz-enfam. III.-8, p. 39 (1894).

Heptapleurum Cavalerici Léveillé in Fedde, Rep. Spec. Nov. 1x. 326 (1911); Fl. Kouy-Tchéou, 35 (1914). — Synon. nov.

China. K w e i c h o u : ouest de Lo-fou, rivière de Pia-nai, J. Cavalerie, no. 2658, Nov. 5, 1905, "petit arbre" (holotype of Heptapleurum Cavaleriei; photo. in A. A.).

Cavalerie's no. 2658 has the leaves somewhat less prominently reticulate than most of the specimens before me, but in all other characters the specimen which is in fruit agrees well with the Chinese, Indian and Malaysian material before me. I am unable to see any constant characters to separate *S. elliptica* from *S. venulosa* (Wight & Arn.) Harms and follow C. B. Clarke, Viguier and Handel-Mazzetti in uniting the two.

### Schefflera spec.

Acanthopanax Esquirolii Léveillé in Bull. Géog. Bot. xxiv. 143 (1914); Fl. Kouy-Tchéou, 33 (1914).

CHINA. K we i chou: district de Tin-fan, J. Cavalerie, 1847 bis, Nov. 1914 (holotype of Acanthopanax Esquirolii; merotype in A. A.).

Acanthopanax Esquirolii seems to be related to S. octophylla (Lour.) Harms, but is readily distinguished by the remotely serrulate leaflets.

The slender-pedicelled flowers are borne in many flowered longpeduncled umbels which seem to form large panicles; the inflorescence is sparingly stellate-pubescent; the style is about one mm. long. It may be a new species, but the material is too fragmentary for a satisfactory description.

### Schefflera spec.

Eleutherococcus Bodinieri Léveillé in Bull. Géog. Bot. xxiv. 144 (1914); Fl. Kouy-Tchéou, 33 (1914).

China. K w e i c h o u : district de Tsin-gay, vallée de Kia-latchang, J. Laborde in hb. Bodinier, Dec. 21, 1897, "grand arbuste" (holotype of Eleutherococcus Bodinieri; photo. in A. A.).

Eleutherococcus Bodinieri apparently belongs to Schefflera and may be related to S. Bodinieri (Lévl.) Rehd., but the leaves are 3—6-foliolate and the leaflets are elliptic to oblong; the broader leaflets are mostly remotely and rather coarsely dentate toward the apex, while the narrower ones are entire. It may be a new species, but as I have only a photograph and not the original specimen before me, I have to leave the question open.

Brassaiopsis ciliata Dunn in Jour. Linn. Soc. Bot. xxxv. 499 (1903).

Acanthopanax Bodinieri Léveillé in Bull. Géog. Bot. xxiv. 143 (1914); Fl. Kouy-Tchéou, 33 (1914). — Synon. nov.

China. K we i chou: environs de Gan-pin, plante rare, pousse dans le fond d'une profonde depression sombre et humide en forme de Tong, L. Martin in hb. Bodinier, no. 1928, Oct. 24, 1897, "tige sous-ligneuse, de 1 m. de haut, fl. blanches" (holotype of Acanthopanax Bodinieri; photo. in A. A.).

Brassaiopsis tripteris (Lévl.), comb. nov.

Heptapleurum tripteris Léveillé in Bull. Géog. Bot. xxiv. 145 (1914); Fl. Kouy-Tchéou, 35 (1914); Cat. Ill. Pl. Seu-Tchouen, pl. 1 (1918) MS.

China. K we ichou: ouest de Lo-fou, bois, J. Cavalerie, no. 2566, Nov. 1905 (holotype of Heptapleurum tripteris; merotype in A. A.).

Brassiopsis tripteris is a very distinct species. In habit it resembles B. ficifolia Dunn, but is even lower; the leaves are tripartite to the base, or sometimes as in the specimen before me with an additional small basal lobe, and are conspicuously spinose-serrulate, the leaflets ending into a long slender acumen not shown in the figure cited above.

Nothopanax Delavayi (Franch.) Harms in Bot. Jahrb. xxix. 488 (1900).

Panax Delavayi Franchet in Jour. de Bot. x. 305 (1896). — Léveillé, Cat. Pl. Yun-Nan, 11 (1915).

Aralia Bodinieri Léveillé in Bull. Géog. Bot. xxiv. 143 (1914); Fl. Kouy-Tchéou, 34 (1914). — Synon. nov.

Heptapleurum Esquirolii Léveillé, l. c., 145 (1914); l. c. 35 (1914). — Synon. nov.

China. K w e i c h o u : environs de Gan-pin, dans les rocailles, L. Martin in hb. Bodinier, no. 2696, Aug. 2, 1897, "petit arbuste, fl. blanches" (syntype of Aralia Bodinieri; photo. in A. A.); same locality and same collector, no. 2696 in part, Aug. 27, 1899 (syntype of Aralia Bodinieri, ex Léveillé); Pin-fa, J. Cavalerie, no. 871, Feb. 17, 1905, "fruit noir" (holotype of Heptapleurum Esquirolii, photo. in A. A.).

Aralia chinensis L. var. nuda Nakai in Jour. Arnold Arb. v. 32 (1924).

Eleutherococcus Mairei Léveillé in Fedde, Rep. Spec. Nov. XIII. 342 (1914); Cat. Pl. Yun-Nan, 11 (1915). — Synon. nov.

China. Y u n n a n: brousse des montagnes à Pe-long-tsin, alt. 3200 m., E. E. Maire, Nov. 1913, "petit arbre moelleux, haut 3-4 m., feuilles pennées, en panache au sommet" (holotype of Eleutherococcus Mairei; merotype in A. A.).

Maire's specimen consists only of an inflorescence with flowers and immature fruits, about 35 cm. long and 11 cm. wide; it agrees exactly with *A. chinensis* and the rather slight pubescence indicates var. *nuda*.

#### CORNACEAE

Cornus oblonga Wallich in Roxburgh, Fl. Ind. 1. 432 (1920). — Léveillé, Cat. Pl. Yun-Nan, 59 (1916).

Ardisia discolor Léveillé in Fedde, Rep. Spec. Nov. x. 373 (1912); Fl. Kouy-Tchéou, 283 (1915). — Synon. nov.

China. K weichou: Ma-jo, J. Cavalerie, no. 3610 (holotype of Ardisia discolor; merotype in A. A.).

Cornus Monbeigii Hemsley in Kew Bull. Misc. Inform. 1909, p. 333, "Mombeigii."

Cornus rosea Léveillé in Bull. Géog. Bot. xxiv. 288 (1914); Cat. Pl. Yun-Nan, 59 (1916). — Synon. nov.

CHINA. Y u n n a n: paturages du plateau de Je-ma-tchouan, 3200 m., E. E. Maire, July 1912 (holotype of C. rosea; merotype in A. A.).

Cornus macrophylla Wallich in Roxburgh, Fl. Ind. 1. 433 (1820); — Léveillé, Fl. Kouy-Tchéou, 116 (1914); Cat. Pl. Yun-Nan, 59 (1916).

Cornus Bodinieri Léveillé, Fl. Kouy-Tchéou, 116 (1914), pro synon. C. macrophyllae.

CHINA. K we i chou: environs de Kouy-yang, bois de la pagode Kien-lin-chan, E. Bodinier, no. 1587 in part, April 14, 1898 (holotype of C. Bodinieri; photo. in A. A.); près du College, a Lantsong, E. Bodinier, no. 1587 in part, May 7, 1897.

The name *Cornus Bodinieri* is quoted only as a synonym of *C. macrophylla* (l. c.), though the labels of the two specimens cited above bear the name *Cornus Bodinieri* and not that of *C. macrophylla*. In the Flore du Kouy-Tchéou only the specimen from Kouy-yang is cited. Bodinier gives on the label of this specimen the following description of the habit of the tree and states that it is called in Chinese San chou = Arbre-parapluie: "Cet abre, qq. fois très grand, pousse d'abord un premier étage de branches partant à peu près de même point et s'étendant horizontalement comme un paraplue, plus haut, un second étage de branches, puis un troisième, puis une tête droite."

Cornus paucinervis Hance in Jour. Bot. xix. 217 (1881). — Léveillé, Fl. Kouy-Tchéou, 116 (1915); Cat. Pl. Yun-Nan, 59 (1916).

Cornus Amblardi Léveillé in Bull. Soc. Bot. France, Li. cxliv. (1904); Fl. Kouy-Tchéou, 115 (1914); Cat. Pl. Yun-Nan, 59 (1916). — Synon. nov.

China. K o u y - T c h é o u : Pin-fa, bords des ruisseaux, J. Cavalerie, no. 80, May 30 and July 21, 1902, "hauteur moyenne 1 m., fl. blanches" (holotype of C. Amblardi; photo. in A. A.); Kouy-yang, mont du Collège, à la Cascade, E. Bodinier, no. 2317, May 28, 1898, "arbuste, belles fleurs blanches" (cited in Fl. Kouy-Tchéou under C. Amblardi; duplicate in A. A.).

Cornus canadensis Linnaeus, Spec. Pl. 118 (1753).

Cornus Fauriei Léveillé in Fedde, Rep. Spec. Nov. vIII. 281 (1910). — Synon. nov.

SAGHALIN: in silvis Soriofka, *U. Faurie*, no. 762, Sept. 2, 1908 (holotype of *C. Fauriei*; photo. in A. A.).

Cornus capitata Wall. var. mollis Rehder in Sargent, Pl. Wilson. II. 579 (1916, March).

? Cornus capitata var. hypoleuca Léveillé, Cat. Pl. Yun-Nan, 59 (1916, May).

CHINA. Y u n n a n: mi-mont du Io-chan, 3300 m., E. E. Maire, June 1912 (holotype of C. capitata var. hypoleuca; ex Léveillé).

I have not seen the type of *C. capitata* var. *hypoleuca*, but according to Léveillé's description it is probably the same as my *C. capitata* var. *mollis* which was based on Hupeh specimens.

(To be continued)

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